

## ABSTRACT

[0076] New instruction definitions for a packet add (PADD) operation and for a single instruction multiple add (SMAD) operation are disclosed. In addition, a new dedicated PADD logic device that performs the PADD operation in about one to two processor clock cycles is disclosed. Also, a new dedicated SMAD logic device that performs a single instruction multiple data add (SMAD) operation in about one to two clock cycles is disclosed.